Table III. Test results by electron micrograph.

	Product	Brand	Test Method	No. of Samples	Conditions of Test-F	Presence of Free Fibers	% Free Fiber[a]
1.	Automobile drum brakes	A	Friction	6	300 - 800	Few	<1
2.	Automobile drum brakes	B	Friction	6	250 - 800	None	0
3.	Automobile drum brakes	C	Friction	5	900 - 700	Few	<1
4.	Automobile drum brakes	C	Friction	1	700 - 900	Numerous	~10
5.	Automobile drum brakes	D French	Friction	5	300 - 800	Few	<1
6.	Automobile drum brakes	E	Friction	5	300 - 700	Few	<1
7.	Automobile drum brakes	F German	Friction	5	300 - 800	Few	<1
8.	Automobile drum brakes	G	Friction	2	100 - 500	Few	<1
9.	Automobile drum brakes	G	Friction	1	600 - 700	Numerous	~15
10.	Automobile drum brakes	H	Friction	2	100 - 500	Few	<1
11.	Automobile clutch	J	Dynamometer	1	Normal driving	None	0
12.	Automobile disk brake	K	Dynamometer	1	Normal driving	Few	<5
13.	Bus drum brake	L	Dynamometer	1	City driving	None	0
14.	Bus drum brake	M	Friction	2	450 - 550	None	0
15.	Truck drum brake (light)	F	Friction	10	300 - 800	Few	<1

[a] Weight estimated from fiber volume.

Some independent experiments done at a brake lining research laboratory[11] have shown that all of the magnesium present in the chrysotile asbestos originally in the lining can be accounted for in the decomposition products. However, the characteristic X-ray diffraction pattern of chrysotile asbestos had vanished. Thus, it is apparent that under conditions in which asbestos is worn from the lining of a brake, the asbestos is destroyed.

Conclusion

Only a very small proportion of the asbestos worn from brake linings is released as free fiber; the remainder is converted into some other mineral as a result of the extreme temperatures generated at small spots on the lining surface. Thus, although urban air contains a few free fibers as a result of brake lining wear, they represent a very small proportion of the total asbestos used in manufacture of brakes. Many sources of respirable fibers not associated with asbestos products have been identified,[12] and free fibers from brake lining wear seem to be an inconsequential health factor in urban air pollution.

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